RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10|531|532

Source: PCT

Date Processed by STIC: 4-25-05

ENTERED

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       RAW SEQUENCE LISTING              DATE: 04/25/2005
       PATENT APPLICATION:  US/10/531,532    TIME: 12:26:00

       Input Set : A:\MNM001PC.txt
       Output Set: N:\CRF4\04252005\J531532.raw

   4 <110> APPLICANT: MILLENIUM PHARMACEUTICALS, INC., et al.
   6 <120> TITLE OF INVENTION: SPLEEN TYROSINE KINASE CATALYTIC DOMAIN: CRYSTAL
   7       STRUCTURE AND BINDING POCKETS THEREOF
   9 <130> FILE REFERENCE: MNM/001 PCT
C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/531,532
C--> 12 <141> CURRENT FILING DATE: 2005-04-15
  14 <150> PRIOR APPLICATION NUMBER: 60/419,382
  15 <151> PRIOR FILING DATE: 2002-10-16
  17 <160> NUMBER OF SEQ ID NOS: 11
  19 <170> SOFTWARE: PatentIn Ver. 3.2
  21 <210> SEQ ID NO: 1
  22 <211> LENGTH: 635
  23 <212> TYPE: PRT
  24 <213> ORGANISM: Homo sapiens
  26 <400> SEQUENCE: 1
  27       Met Ala Ser Ser Gly Met Ala Asp Ser Ala Asn His Leu Pro Phe Phe
  28        1               5                  10                  15
  30       Phe Gly Asn Ile Thr Arg Glu Glu Ala Glu Asp Tyr Leu Val Gln Gly
  31                    20                  25                  30
  33       Gly Met Ser Asp Gly Leu Tyr Leu Leu Arg Gln Ser Arg Asn Tyr Leu
  34                35                  40                  45
  36       Gly Gly Phe Ala Leu Ser Val Ala His Gly Arg Lys Ala His His Tyr
  37             50                  55                  60
  39       Thr Ile Glu Arg Glu Leu Asn Gly Thr Tyr Ala Ile Ala Gly Gly Arg
  40        65                  70                  75                  80
  42       Thr His Ala Ser Pro Ala Asp Leu Cys His Tyr His Ser Gln Glu Ser
  43                    85                  90                  95
  45       Asp Gly Leu Val Cys Leu Leu Lys Lys Pro Phe Asn Arg Pro Gln Gly
  46                   100                 105                 110
  48       Val Gln Pro Lys Thr Gly Pro Phe Glu Asp Leu Lys Glu Asn Leu Ile
  49                   115                 120                 125
  51       Arg Glu Tyr Val Lys Gln Thr Trp Asn Leu Gln Gly Gln Ala Leu Glu
  52                   130                 135                 140
  54       Gln Ala Ile Ile Ser Gln Lys Pro Gln Leu Glu Lys Leu Ile Ala Thr
  55       145                 150                 155                 160
  57       Thr Ala His Glu Lys Met Pro Trp Phe His Gly Lys Ile Ser Arg Glu
  58                   165                 170                 175
  60       Glu Ser Glu Gln Ile Val Leu Ile Gly Ser Lys Thr Asn Gly Lys Phe
  61                   180                 185                 190
  63       Leu Ile Arg Ala Arg Asp Asn Asn Gly Ser Tyr Ala Leu Cys Leu Leu
  64                   195                 200                 205
  66       His Glu Gly Lys Val Leu His Tyr Arg Ile Asp Lys Asp Lys Thr Gly
  67                   210                 215                 220
```

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```
69   Lys Leu Ser Ile Pro Glu Gly Lys Lys Phe Asp Thr Leu Trp Gln Leu
70   225             230             235             240
72   Val Glu His Tyr Ser Tyr Lys Ala Asp Gly Leu Leu Arg Val Leu Thr
73               245             250             255
75   Val Pro Cys Gln Lys Ile Gly Thr Gln Gly Asn Val Asn Phe Gly Gly
76               260             265             270
78   Arg Pro Gln Leu Pro Gly Ser His Pro Ala Thr Trp Ser Ala Gly Gly
79               275             280             285
81   Ile Ile Ser Arg Ile Lys Ser Tyr Ser Phe Pro Lys Pro Gly His Arg
82       290             295             300
84   Lys Ser Ser Pro Ala Gln Gly Asn Arg Gln Glu Ser Thr Val Ser Phe
85   305             310             315             320
87   Asn Pro Tyr Glu Pro Glu Leu Ala Pro Trp Ala Ala Asp Lys Gly Pro
88               325             330             335
90   Gln Arg Glu Ala Leu Pro Met Asp Thr Glu Val Tyr Glu Ser Pro Tyr
91               340             345             350
93   Ala Asp Pro Glu Glu Ile Arg Pro Lys Glu Val Tyr Leu Asp Arg Lys
94               355             360             365
96   Leu Leu Thr Leu Glu Asp Lys Glu Leu Gly Ser Gly Asn Phe Gly Thr
97       370             375             380
99   Val Lys Lys Gly Tyr Tyr Gln Met Lys Lys Val Val Lys Thr Val Ala
100  385             390             395             400
102   Val Lys Ile Leu Lys Asn Glu Ala Asn Asp Pro Ala Leu Lys Asp Glu
103              405             410             415
105   Leu Leu Ala Glu Ala Asn Val Met Gln Gln Leu Asp Asn Pro Tyr Ile
106              420             425             430
108   Val Arg Met Ile Gly Ile Cys Glu Ala Glu Ser Trp Met Leu Val Met
109              435              440             445
111   Glu Met Ala Glu Leu Gly Pro Leu Asn Lys Tyr Leu Gln Gln Asn Arg
112       450             455             460
114   His Val Lys Asp Lys Asn Ile Ile Glu Leu Val His Gln Val Ser Met
115  465             470             475             480
117   Gly Met Lys Tyr Leu Glu Glu Ser Asn Phe Val His Arg Asp Leu Ala
118              485             490             495
120   Ala Arg Asn Val Leu Leu Val Thr Gln His Tyr Ala Lys Ile Ser Asp
121              500             505             510
123   Phe Gly Leu Ser Lys Ala Leu Arg Ala Asp Glu Asn Tyr Tyr Lys Ala
124              515             520             525
126   Gln Thr His Gly Lys Trp Pro Val Lys Trp Tyr Ala Pro Glu Cys Ile
127       530             535             540
129   Asn Tyr Tyr Lys Phe Ser Ser Lys Ser Asp Val Trp Ser Phe Gly Val
130  545             550             555             560
132   Leu Met Trp Glu Ala Phe Ser Tyr Gly Gln Lys Pro Tyr Arg Gly Met
133              565             570             575
135   Lys Gly Ser Glu Val Thr Ala Met Leu Glu Lys Gly Glu Arg Met Gly
136              580             585             590
138   Cys Pro Ala Gly Cys Pro Arg Glu Met Tyr Asp Leu Met Asn Leu Cys
139              595             600             605
141   Trp Thr Tyr Asp Val Glu Asn Arg Pro Gly Phe Ala Ala Val Glu Leu
```

RAW SEQUENCE LISTING   DATE: 04/25/2005
PATENT APPLICATION: **US/10/531,532**   TIME: 12:26:00

Input Set : **A:\MNM001PC.txt**
Output Set: **N:\CRF4\04252005\J531532.raw**

```
142          610              615              620
144     Arg Leu Arg Asn Tyr Tyr Tyr Asp Val Val Asn
145          625              630              635
148 <210> SEQ ID NO: 2
149 <211> LENGTH: 8
150 <212> TYPE: PRT
151 <213> ORGANISM: Artificial Sequence
153 <220> FEATURE:
154 <223> OTHER INFORMATION: Decsription of Artificial Sequence: Synthetic peptide
156 <220> FEATURE:
157 <221> NAME/KEY: MOD_RES
158 <222> LOCATION: (1)
159 <223> OTHER INFORMATION: NAc-Glu
161 <220> FEATURE:
162 <223> OTHER INFORMATION: c-term amidation
164 <400> SEQUENCE: 2
165     Glu Glu Asp Asp Tyr Glu Ser Pro
166       1               5
169 <210> SEQ ID NO: 3
170 <211> LENGTH: 39
171 <212> TYPE: DNA
172 <213> ORGANISM: Artificial Sequence
174 <220> FEATURE:
175 <223> OTHER INFORMATION: Decsription of Artificial Sequence: Primer
177 <400> SEQUENCE: 3
178     cgcggatccg ccaccatgga cacagaggtg tacgagagc                    39
182 <210> SEQ ID NO: 4
183 <211> LENGTH: 58
184 <212> TYPE: DNA
185 <213> ORGANISM: Artificial Sequence
187 <220> FEATURE:
188 <223> OTHER INFORMATION: Decsription of Artificial Sequence: Primer
190 <400> SEQUENCE: 4
191     cggcggatcc ttaatgatga tgatgatgat ggttcaccac gtcatagtag taattgcg   58
195 <210> SEQ ID NO: 5
196 <211> LENGTH: 8
197 <212> TYPE: PRT
198 <213> ORGANISM: Artificial Sequence
200 <220> FEATURE:
201 <223> OTHER INFORMATION: Decsription of Artificial Sequence: Synthetic peptide
203 <400> SEQUENCE: 5
204     Glu Glu Asp Asp Tyr Glu Ser Pro
205       1               5
208 <210> SEQ ID NO: 6
209 <211> LENGTH: 5
210 <212> TYPE: PRT
211 <213> ORGANISM: Artificial Sequence
213 <220> FEATURE:
214 <223> OTHER INFORMATION: Decsription of Artificial Sequence: Synthetic peptide
```

RAW SEQUENCE LISTING   DATE: 04/25/2005
PATENT APPLICATION: **US/10/531,532**   TIME: 12:26:00

Input Set : **A:\MNM001PC.txt**
Output Set: **N:\CRF4\04252005\J531532.raw**

```
216 <400> SEQUENCE: 6
217     Asp Glu Glu Asp Tyr
218       1               5
221 <210> SEQ ID NO: 7
222 <211> LENGTH: 5
223 <212> TYPE: PRT
224 <213> ORGANISM: Artificial Sequence
226 <220> FEATURE:
227 <223> OTHER INFORMATION: Decsription of Artificial Sequence: Synthetic peptide
229 <400> SEQUENCE: 7
230     Asp Glu Glu Tyr Asp
231       1               5
234 <210> SEQ ID NO: 8
235 <211> LENGTH: 5
236 <212> TYPE: PRT
237 <213> ORGANISM: Artificial Sequence
239 <220> FEATURE:
240 <223> OTHER INFORMATION: Decsription of Artificial Sequence: Synthetic peptide
242 <400> SEQUENCE: 8
243     Asp Glu Tyr Glu Asp
244       1               5
247 <210> SEQ ID NO: 9
248 <211> LENGTH: 5
249 <212> TYPE: PRT
250 <213> ORGANISM: Artificial Sequence
252 <220> FEATURE:
253 <223> OTHER INFORMATION: Decsription of Artificial Sequence: Synthetic peptide
255 <400> SEQUENCE: 9
256     Asp Tyr Glu Glu Val
257       1               5
260 <210> SEQ ID NO: 10
261 <211> LENGTH: 5
262 <212> TYPE: PRT
263 <213> ORGANISM: Artificial Sequence
265 <220> FEATURE:
266 <223> OTHER INFORMATION: Decsription of Artificial Sequence: Synthetic peptide
268 <220> FEATURE:
269 <221> NAME/KEY: MOD_RES
270 <222> LOCATION: (5)
271 <223> OTHER INFORMATION: Nle
273 <400> SEQUENCE: 10
```
W--> **274   Tyr Ser Ile Ile Xaa**
```
275       1               5
278 <210> SEQ ID NO: 11
279 <211> LENGTH: 26
280 <212> TYPE: PRT
281 <213> ORGANISM: Artificial Sequence
283 <220> FEATURE:
284 <223> OTHER INFORMATION: Description of Artificial Sequence: Consensus
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RAW SEQUENCE LISTING   DATE: 04/25/2005

PATENT APPLICATION: **US/10/531,532**   TIME: 12:26:00

Input Set : **A:\MNM001PC.txt**

Output Set: **N:\CRF4\04252005\J531532.raw**

```
  285        sequence
  287 <220> FEATURE:
  288 <221> NAME/KEY: MOD_RES
  289 <222> LOCATION: (6)..(12)
  290 <223> OTHER INFORMATION: Variable amino acid
  292 <220> FEATURE:
  293 <221> NAME/KEY: MOD_RES
  294 <222> LOCATION: (14)
  295 <223> OTHER INFORMATION: Variable amino acid
  297 <220> FEATURE:
  298 <221> NAME/KEY: MOD_RES
  299 <222> LOCATION: (16)
  300 <223> OTHER INFORMATION: Variable amino acid
  302 <220> FEATURE:
  303 <221> NAME/KEY: MOD_RES
  304 <222> LOCATION: (20)
  305 <223> OTHER INFORMATION: Variable amino acid
  307 <400> SEQUENCE: 11
W--> 308     Asp Phe Gly Trp Ser Xaa Xaa Xaa Xaa Xaa Xaa Xaa Arg Xaa Thr Xaa
  309          1               5                  10                  15
  311     Cys Gly Thr Xaa Asp Tyr Leu Pro Pro Glu
  312                      20              25
```

RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 04/25/2005
PATENT APPLICATION: US/10/531,532   TIME: 12:26:01

Input Set : A:\MNM001PC.txt
Output Set: N:\CRF4\04252005\J531532.raw

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:10; Xaa Pos. 5
Seq#:11; Xaa Pos. 6,7,8,9,10,11,12,14,16,20

VERIFICATION SUMMARY   DATE: 04/25/2005
PATENT APPLICATION: **US/10/531,532**   TIME: 12:26:01

Input Set : **A:\MNM001PC.txt**
Output Set: **N:\CRF4\04252005\J531532.raw**

```
L:11 M:270 C: Current Application Number differs, Replaced Current Application Number
L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:274 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:0
L:308 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:0
M:341 Repeated in SeqNo=11
```